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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/803,084

03/08/2001

Thomas P. Glenn

G0049

8517

7590

11/03/2004

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EXAMINER

WILLIAMS, ALEXANDER O

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,084

Applicant(s)

GLENN ET AL

Examiner

Alexander O Williams

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 22-25 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15, 22-25 and 29-39 is/are allowed.
- 6) ☒ Claim(s) 40 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2826

Serial Number: 09/803084 . Attorney's Docket #: G0049

Filing Date: 3/8/2001;

Applicant: Glenn et al.

Examiner: Alexander Williams

Applicant's Response filed 8/16/04 has been acknowledged.

Claims 16 to 22 and 26 to 29 have been canceled.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 41 recites the limitation "said first alignment mark" in claim 41. There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2826

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 40 and 41, insofar as claim 41 can be understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable Matsumoto (U.S. Patent Application Publication # 2001/0040224 A1).

40. Matsumoto (figures 1 to 24) specifically figure 2 show a wafer 2 comprising: a first surface (**top surface of 2**); a second surface (**bottom surface of 2**); a scribe line (**formed on the wafer**) coupled to said first surface; and a means 12. **Matsumoto** fail to explicitly show a means for determining a position of said scribe line from said second surface, said means for determining extending through said wafer from said first surface to said second surface.

DOCUMENT-IDENTIFIER: US 20010040224 A1

TITLE: Positional deviation detecting method and device
manufacturing method using the same

Detail Description Paragraph - DETX (15):

[0066] On the mask 1, there is an alignment mark (grating lens) 30a comprising a Fresnel zone plate having a power only in X direction, which is formed on a scribe line. First order transmissively diffractive light from the mark is being influenced by light converging function. Another alignment mark (grating lens) 30b is formed on a scribe line of a wafer 2, and it comprises a Fresnel zone plate having a power only in X direction. By this mark, the reflectively diffractively light (shown as transmissive light in FIG. 5) is being influenced by light diverging function. The diffraction light goes through the mask and is collected upon the sensor 12.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to use the teaching of Matsumoto's sensor in determining a alignment mark to be a hole from a first surface to a second surface for the purpose of providing alignment mark for other procedures can be completed accurately for the completion of making a device.

Claims 1-15, 22-25 and 30-39 are allowed.

Art Unit: 2826

Response

Applicant's arguments filed 8/16/04 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

The following references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/797,620,618,226,59,72,644,650	6/29/03 11/19/03 5/7/04 10/31/04
Other Documentation: foreign patents and literature in 257/797,620,618,226,59,72,644,650	6/29/03 11/19/03 5/7/04 10/31/04
Electronic data base(s): U.S. Patents EAST	6/29/03 11/19/03 5/7/04 10/31/04


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2826

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AOW
10/31/04



Alexander Williams
Primary Examiner